

**IT IS THE VENDOR'S RESPONSIBILITY TO CHECK  
FOR ADDENDUMS PRIOR TO SUBMITTING PROPOSALS**

**NOTICE TO BIDDERS  
SPECIFICATION NO. 07-173**

The City of Lincoln, Nebraska intends to purchase and invites you to submit a sealed bid for:

**REBID  
PIPELINE TELEVISION INSPECTION SYSTEM and  
TRADE-IN/SALE OF CURRENT INSPECTION VEHICLE AND  
EQUIPMENT**

Sealed bids will be received by the City of Lincoln, Nebraska on or before **12:00 noon Friday, June 1, 2007** in the office of the Purchasing Agent, Suite 200, K Street Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Bids will be publicly opened and read at the K Street Complex.

Bids may be downloaded from the City's website at [www.lincoln.ne.gov](http://www.lincoln.ne.gov) Keyword: Bid. Prospective submitters must monitor the bid listing for any addendums.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above. Late bids will not be considered. **Fax or e-mail bids are not acceptable. Bid response must be in a sealed envelope.**

# Technical Specifications for Pipeline Television Inspection System

## 1. **INTENT**

- 1.1 It is the intent of this specification to provide for the purchase of one (1) complete color television vehicle and inspection system.
  - 1.1.1 The system shall be capable of inspecting 8" to 30" pipes and sewer lines.
  - 1.1.2 The system will be used for the inspection of underground infrastructure assets from a single access point.
- 1.2 Equipment must be able to operate the City's existing Aries equipment.
  - 1.2.1 This includes model EE1200 straight view cameras, PE1111 bulb pan and tilt cameras, PE2000 LED pan and tilt zoom cameras, and TR1000 and TR2000 tread drive tractors.
- 1.3 **The unit must be supplied through/purchased from a Nebraska Licensed Dealer or manufacturer and title must pass through said dealer or manufacturer.**

## 2. **EQUIVALENT PRODUCT**

- 2.1 The following specification is based upon a television inspection system as manufactured by ARIES Industries, Inc.
- 2.2 Bids will be accepted for consideration on any make or model that is equal or superior to the television inspection system specified.
  - 2.2.1 Decisions of equivalency will be at the sole interpretation of the City of Lincoln.
  - 2.2.2 A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence.
  - 2.2.3 Original manufacturer's brochures of the proposed unit are to be submitted with the proposal.
- 2.3 It shall be the bidder's responsibility to carefully examine each item of the specification.
  - 2.3.1 Failure to offer a completed bid or failure to respond to each section of the technical specification (YES / NO) may cause the proposal to be rejected without further review as "non-responsive."
  - 2.3.2 All exceptions and/or deviations shall be fully described in the appropriate section.
  - 2.3.3 Deceit in responding to the specification will be cause for automatic rejection.
- 2.4 The bidder must include a separate sheet where any and all deviations to the specifications are listed.
  - 2.4.1 Each deviation must reference the listed specification, by number if necessary, and explain in full detail how the proposed system is different.

## 3. **SUPPLEMENTAL INSTRUCTIONS TO BIDDERS**

- 3.1 Bid prices shall include entire cost of the vehicle, equipment and delivery to the Lincoln Wastewater Plant.
- 3.2 Bidder shall submit two (2) complete sets of bid documents and all supporting material, unless otherwise stipulated.
- 3.3 All inquiries regarding these specifications shall be directed via e-mail or faxed written request to Bob Walla, Assistant Purchasing Agent ([rwalla@lincoln.ne.gov](mailto:rwalla@lincoln.ne.gov)) Or Fax: (402)441-6513.
  - 3.3.1 These inquiries and/or responses shall be distributed to prospective bidders as an addenda.
  - 3.3.2 The City of Lincoln shall only reply to written inquiries received within five (5) calendar days of bid opening.
- 3.4 Bid and prices must be valid for a minimum of 120 days after the bid submission date.
- 3.5 A vehicle layout plan is attached to this bid for vendor reference. (Attachment A)

## 4. **EXPERIENCE AND LONGEVITY**

- 4.1 All modifications made to the standard production unit described in the manufacturer's brochures must be certified to have been in prior successful use through the submission of a minimum of three references to be included in the proposal.

- 4.1.1 Failure to submit references for non-standard units will deem the proposal "non-responsive" and be rejected without further review.
- 4.2 The equipment to be furnished shall be the product of a qualified firm or sub-contracted firm that is regularly engaged in the manufacture and supply of this equipment.
  - 4.2.1 The successful bidder must supply a list of (6) users of the equipment specified.
  - 4.2.2 Of these references, 50% shall be private contractors and 50% shall be municipal customers.

**5. LOAN EQUIPMENT PROGRAM**

- 5.1 If the manufacturer's service center is unable to repair and have ready to return any component of the system within 48 hours of receipt from the purchaser, the service center shall have available loaner equipment for immediate shipment.

**6. TRADE-IN/ FOR SALE**

- 6.1 The City of Lincoln offers the City's 1996 Chevy gas chassis with 18' step van body.
  - 6.1.1 The vehicle has approximately 60,273 miles.
  - 6.1.2 The components included for trade value are:
    - 6.1.2.1 the outfitted vehicle,
    - 6.1.2.2 generator with remote control panel,
    - 6.1.2.3 (2) TV cable reels with Cues gold cable (1000' AVG.),
    - 6.1.2.4 tool chest,
    - 6.1.2.5 small air compressor,
    - 6.1.2.6 workbench with maple top,
    - 6.1.2.7 washdown system with retractable reel,
    - 6.1.2.8 Aries rack power supply,
    - 6.1.2.9 14" monitor, and
    - 6.1.2.10 VHS video recorder.
    - 6.1.2.11 Aries Pan and Tilt Color Camera
    - 6.1.2.12 Mainline eagle eye color cameras ( 2 each)
    - 6.1.2.13 Aries Track Transporters TR 2000 and miscellaneous parts
    - 6.1.2.14 Sets of skids 8", 10", 12", 15", 21", 24".
    - 6.1.2.15 Sets of skids 6"
    - 6.1.2.16 Sets of Top Runners ( 2 each)
    - 6.1.2.17 Transmissions for the 1200 reel. ( 3 each)
    - 6.1.2.18 Hi-performance light heads ( 5 each)
    - 6.1.2.19 6" light heads ( 2 each)
    - 6.1.2.20 1200 Reel Levelwinds with 3/4" pitch ( 2 each)
    - 6.1.2.21 1200 Reel Footage Head Assembly ( 3 each)
    - 6.1.2.22 Motors for the 1200 Reel Assembly ( 2 each)
    - 6.1.2.23 Transmission for the 1200 Reel Assembly
    - 6.1.2.24 Miscellaneous parts, handles, and sprockets for the 1200 Reel.
- 6.2 The trade-in vehicle and equipment may be viewed in person by appointment only.
  - 6.2.1 Contact Jerry Morris at 402-441-7839.
- 6.3 Please see attached photos 1 - 8 on the web page for vehicle and accessory condition.
- 6.4 The City reserves the right to sell this vehicle to the highest bidder separate from the purchase of the new unit.
  - 6.4.1 If the winning bidder of the new unit bids the highest trade-in value on the used unit, total amount paid to vendor will be based on deduction of trade-in.
- 6.5 All accessories listed in 6.1.2 are included with the truck and will not be sold separately.

**7. HI-CUBE VAN**

- 7.1 All bidders must comply with the licensing requirements for motor vehicle dealers established under the Motor Vehicle Industries Licensing Act, Nebraska Revised Statutes, Chapter 60, Article 14.
  - 7.1.1 The licensing requirements must be met at time of bid opening for the bid to be valid.
- 7.2 2007 Ford E450 16' (maximum) hi-cube type van.

**Meet Specs.****Yes No**

	7.3	The chassis shall be equipped as follows:
___	___	7.3.1 Gas-powered engine
___	___	7.3.2 176" wheelbase, 118" cab-to-axle (108" effective)
___	___	7.3.3 14,050 lb gross vehicle weight rating
___	___	7.3.4 Power steering
___	___	7.3.5 Hydraulic front and rear disc brakes
___	___	7.3.6 12V 115A alternator
___	___	7.3.7 12V 600CCA automotive battery
___	___	7.3.8 ICC running lights plus standard lights including stop, turn, reverse, plate, and 4-way
___	___	7.3.9 Mud flaps
___	___	7.3.10 55g fuel tank, driver's side fill
	7.4	The drive train shall be equipped as follows:
___	___	7.4.1 6.8L V10 gas engine, 305hp @ 3250rpm, 420lb-ft @ 3250rpm
___	___	7.4.2 Differential ratio 4.10 (Limited-Slip or Positraction Preferred)
___	___	7.4.3 Dry type heavy-duty air filter
___	___	7.4.4 Cartridge type oil filter, disposable type
___	___	7.4.5 Fuel filter
___	___	7.4.6 Heavy-duty cooling system
___	___	7.4.7 Engine block heater (optional)
___	___	7.4.8 Heavy-duty automatic 5-speed transmission with overdrive and auxiliary oil cooler
	7.5	Axles shall be equipped with the following:
___	___	7.5.1 Front GAWR 4600lb, coil type suspension
___	___	7.5.2 Rear GAWR 9450lb, multi-leaf suspension with heavy duty gas charged shock absorbers
___	___	7.5.3 Dual rear wheels
___	___	7.5.4 (7) tires, LT225/75R16E BSW AS and spare of same size & type
	7.6	The vehicle cab area shall be equipped as follows:
___	___	7.6.1 Fresh air heater and defrosters
___	___	7.6.2 Air conditioning
___	___	7.6.3 AM/FM radio
___	___	7.6.4 Dual high back bucket seats with 3-point seatbelts
___	___	7.6.5 Sun visors and arm rests, driver and passenger seats
___	___	7.6.6 Intermittent windshield wipers with washers
___	___	7.6.7 12V dome light
___	___	7.6.8 Passenger side grab handle
___	___	7.6.9 Dual rear view mirrors, external, manual swing-away type with standard top and convex bottom section, retractable and adjustable
___	___	7.6.10 Tilt steering wheel
___	___	7.6.11 10" cab extension
	7.7	The vehicle shall be equipped with a hi-cube van body including:
___	___	7.7.1 Aluminum construction
___	___	7.7.2 84" interior clear height
___	___	7.7.3 96" exterior width
___	___	7.7.4 Maximum interior load space of 192"
___	___	7.7.5 Flat floor, hard wood strip (no plywood)
___	___	7.7.6 Full undercoating
___	___	7.7.7 Rear rollup style door with slam lock hardware
___	___	7.7.8 Aerodynamic wind fairing with full height walkthrough sliding lockable door to cab area
___	7.8.	The vehicle shall be Oxford White in color.
___	7.9	The cab and chassis shall contain all standard equipment and meet all current Federal DOT and State highway motor vehicle standards.

**Meet Specs.****Yes No**

- |       |       |        |  |
|-------|-------|--------|--|
| _____ | _____ | 7.10   | The vehicle shall be additionally equipped with the following aftermarket products:                        |
| _____ | _____ | 7.10.1 | Front and rear amber strobe lights, with controls in cab   |
| _____ | _____ | 7.10.2 | Rear facing LED arrow style traffic advisor, with controls in cab  |
| _____ | _____ | 7.10.3 | (2) 12V rear facing floodlights  |
| _____ | _____ | 7.10.4 | Backup alarm   |
| _____ | _____ | 7.10.5 | Full width 12" diamond plated rear bumper step with minimum 14" ground clearance and maximum 12" step rise |

**8. ON-BOARD AC POWER SYSTEM, 7KW**

- |       |       |       |   |
|-------|-------|-------|---|
| _____ | _____ | 8.1   | The system shall include an on-board electrical power source rated for 7kW of alternating current output.   |
| _____ | _____ | 8.1.1 | The system shall be a commercial mobile generator set, duty-rated for operating at a full 8-hour day minimum.   |
| _____ | _____ | 8.1.2 | Systems that include an "RV" style power source at a lighter duty-rating, shall be deemed unacceptable due to the higher life-cycle cost.   |
| _____ | _____ | 8.2   | All electrical fixtures shall be appropriate for the complete electrical requirements of the system and are installed to NEC codes and local requirements.  |
| _____ | _____ | 8.3   | All wiring shall be run in protective conduits.   |
| _____ | _____ | 8.4   | The electrical system shall include an AC power distribution panel, with a minimum of (6) circuit breakers of appropriate size.   |
| _____ | _____ | 8.5   | A disconnection feature shall be provided for the on-board power supply.  |
| _____ | _____ | 8.5.1 | This will allow for the system to be connected to a commercial 120V AC house power supply through an exterior connection in the vehicle.  |
| _____ | _____ | 8.5.2 | The unit shall be an automatic switchover box with time-delay protection.   |
| _____ | _____ | 8.5.3 | There shall be a weatherproof housing in the driver's side of the vehicle body at an appropriate power rating for the system.   |
| _____ | _____ | 8.5.4 | There shall be a house power cord with weatherproof plug and socket for attaching to house power.   |
| _____ | _____ | 8.6   | The electrical system shall include a 12V system.   |
| _____ | _____ | 8.6.1 | This shall include a 600CCA 12V automotive battery in a protective case as well as a minimum 5A battery-charging unit.  |
| _____ | _____ | 8.6.2 | The 12V system shall be for starting the generator as well as powering all 12V aftermarket equipment including emergency lighting and pumps to prevent any additional load on the vehicle's 12V system. |
| _____ | _____ | 8.6.3 | Any 12V installed equipment that ties into the vehicle's 12V system shall be deemed unacceptable.   |
| _____ | _____ | 8.7   | The overall generator set shall include the following features:   |
| _____ | _____ | 8.7.1 | Commercial mobile duty cycle  |
| _____ | _____ | 8.7.2 | Remote start and stop capability  |
| _____ | _____ | 8.7.3 | Sound attenuated housing with a rating of 69dB at 10' under full load   |
| _____ | _____ | 8.7.4 | Local and remote control panels   |
| _____ | _____ | 8.7.5 | Fueled from vehicle's fuel tank, with safety preventing tank running empty  |
| _____ | _____ | 8.8   | The engine powering the system shall have the following features:   |
| _____ | _____ | 8.8.1 | Gas powered commercial generator  |
| _____ | _____ | 8.8.2 | Centrifugal blower, 500cfm, for alternator and engine   |
| _____ | _____ | 8.8.3 | Replaceable air cleaner   |
| _____ | _____ | 8.8.4 | Electric fuel pump  |
| _____ | _____ | 8.8.5 | Replaceable oil filter and fuel filters   |
| _____ | _____ | 8.8.6 | USDA-approved spark arrest muffler  |
| _____ | _____ | 8.8.7 | Automatic shutdown for low oil pressure and high temperature  |

**Meet Specs.****Yes No**

- |       |       |          |   |
|-------|-------|----------|---|
| _____ | _____ | 8.9      | The alternator producing the electrical power shall have the following features:  |
| _____ | _____ | 8.9.1    | Rated AC output of 120V $\pm$ 2.0%, 60Hz $\pm$ 1.7%   |
| _____ | _____ | 8.9.2    | Double-sealed long-life ball bearings   |
| _____ | _____ | 8.9.3    | Electrographic long-life brushes  |
| _____ | _____ | 8.9.4    | High quality pure sine wave output  |
| _____ | _____ | 8.10     | The generator mounting system shall include the following:  |
| _____ | _____ | 8.10.1   | Base pan for drip control   |
| _____ | _____ | 8.10.2   | Generator enclosure including the following:  |
| _____ | _____ | 8.10.2.1 | Located within or under the vehicle body  |
| _____ | _____ | 8.10.2.2 | Lined with fire retardant noise reduction material  |
| _____ | _____ | 8.10.2.3 | Minimum of 1/2" Luan plywood or comparable wood product with glued and screwed construction                                   |
| _____ | _____ | 8.10.2.4 | Lockable outside access door with ventilation grating and gas-assist cylinders  |
| _____ | _____ | 8.10.3   | Mounting bridge with welded steel framing   |
| _____ | _____ | 8.10.4   | Electrical, fuel, and exhaust connections   |
| _____ | _____ | 8.10.5   | The generator unit specified includes all maintenance points accessible from the outside of the vehicle.                      |
| _____ | _____ | 8.10.5.1 | Slide out mountings are deemed unacceptable.  |
| _____ | _____ | 8.11     | The system shall also include a remote control panel including voltmeter, frequency meter, hour meter, and start/stop switch. |
| _____ | _____ | 8.11.1   | The panel shall be mounted in the control room within clear view of the operator.   |

**9. CONTROL ROOM**

- |       |       |       |   |
|-------|-------|-------|---|
| _____ | _____ | 9.1   | The control room shall be located in the forward section of the hi-cube body.   |
| _____ | _____ | 9.1.1 | It shall be accessible through a sliding door from the driver's compartment and a swing door from the equipment room.                                       |
| _____ | _____ | 9.2   | The walls shall be insulated with 1/2" foam and finished with gray non-porous laminate over Luan plywood or comparable wood product.                        |
| _____ | _____ | 9.3   | The ceiling shall be insulated with 1/2" foam and finished with composite board including a non-porous embossed structoglass surface or comparable surface. |
| _____ | _____ | 9.4   | The room shall include a roof-mounted air conditioning unit with a minimum rating of 13000btu of cooling, combined with a 5600btu rated heat strip.         |
| _____ | _____ | 9.5   | The room shall include a 1500W heater with protective metal guard, mounted on a wall under the desktop.   |
| _____ | _____ | 9.6   | The floor shall be constructed of 1/2" minimum AC-rated plywood with water relief channels.   |
| _____ | _____ | 9.6.1 | The plywood shall then be covered with seamless industrial grade non-skid flooring.   |
| _____ | _____ | 9.7   | A bulkhead wall shall separate the control room from the equipment room and include the following:  |
| _____ | _____ | 9.7.1 | Minimum 2x4 framing with 1/2" 7-ply Luan plywood, or comparable wood product, laminated with non-porous laminate matching corresponding room wall surfaces. |
| _____ | _____ | 9.7.2 | Swinging door of hollow core construction with minimum 10"x23" tinted window and locking handle.  |
| _____ | _____ | 9.7.3 | Bulkhead wall is to be placed so as to not interfere with roll up door operation.   |
| _____ | _____ | 9.8   | The room shall be lit by cold weather fluorescent lighting, with switch next to the bulkhead door.  |
| _____ | _____ | 9.9   | The room shall include a padded bench seat including:   |
| _____ | _____ | 9.9.1 | Seating capacity for (2) people.  |
| _____ | _____ | 9.9.2 | Construction of 3/4" 7-ply Luan plywood or comparable wood product finished with oak trim.  |
| _____ | _____ | 9.9.3 | Removable padded cushion constructed of foam and black vinyl, allowing storage within the seat.   |

**Meet Specs.****Yes No**

___	___	9.9.4	An overhead shelf constructed of ¾" 7-ply Luan plywood or comparable wood product with adequate, finished in matching wall laminate.
___	___	9.10	The room shall include a floor-to-ceiling closet including:
___	___	9.10.1	Minimum ¾" 7-ply Luan plywood or comparable wood product with exterior finish matching wall laminate
___	___	9.10.2	Minimum of (5) removable or adjustable height shelves, constructed from ¾" 7-ply Luan plywood, including ½"x2" oak trim at the front of each shelf.
___	___	9.10.3	Swing-opening doors with hollow core construction, full-length stainless steel hinge, and latching hasps to prevent opening in transit.
___	___	9.11	The room shall include a standard 19" EIA electronics rack for the secure mounting of the system's electronic components.
___	___	9.11.1	The rack shall be mounted above the desktop, and include sufficient free space for future electronic upgrades to the system.
___	___	9.11.2	The rack shall include a slide-out tray for mounting a laptop computer.
___	___	9.12	A countertop shall be included with the following features:
___	___	9.12.1	Minimum ¾" 7-ply Luan plywood construction with non-porous durable laminated finish
___	___	9.12.2	Adequate space for specified system controls, possibly including: camera controller, transporter controller, reel controller, lateral inspection controller, cutter controller, steerable transporter controller, keyboard, and mouse.
___	___	9.13	There shall be a minimum of (2) quad outlet boxes supplied in the room.
___	___	9.14	A securing cord shall be supplied for in-transit storage of 2 adjustable height chairs w/casters.

**10. EQUIPMENT ROOM**

___	___	10.1	The equipment room shall be located in the rearward section of the hi-cube body accessible through the rear body door and a swing door from the control room.
___	___	10.2	The walls shall be insulated with ½" foam and finished with aluminum non-porous laminate over Luan plywood or other suitable smooth covering.
___	___	10.3	The ceiling shall be insulated with ½" foam and finished with composite board including a non-porous embossed structoglass surface or equivalent covering.
___	___	10.4	The floor shall be covered with aluminum tread plate flooring, with caulked protection at wall joints.
___	___	10.5	The room shall be lit by a minimum of (2) cold weather fluorescent light fixtures, with switches placed near entry points.
___	___	10.6	The back of the electronics rack equipment shall be accessible from the equipment room through a hinged door.
___	___	10.7	There shall be a fire extinguisher securely mounted to a wall of the room in clear view of the operator.
___	___	10.7.1	The fire extinguisher shall be a dry chemical type, NFPA-Classified 3A-40BC.
___	___	10.8	A workbench area shall be included with the following features:
___	___	10.8.1	ABS worktop with vise.
___	___	10.8.2	Vise with 5" jaws.
___	___	10.8.3	Aluminum trim protection at all corners.
___	___	10.8.4	Overhead storage cabinet with sliding doors.
___	___	10.9	A lockable tool chest shall be included, Craftsman 65529-6 (no exceptions). A shelf shall be installed above the toolbox, wall mounted, as large as reasonably possible.
___	___	10.10	There shall be a minimum of (2) quad outlet boxes supplied in the room.
___	___	10.11	The TV cable reel system shall be mounted at the rear of the room on the driver's side.
___	___	10.12	A set of vertical storage brackets and hooks shall be included on the passenger side of the vehicle at the rear of the room.
___	___	10.13	Down hole pole storage shall be included in an underbody box accessible through the rear bumper.
___	___	10.14	The room shall include a 3-speed reversible roof vent, Fan-Tastic model 4000R or equal.

**Meet Specs.****Yes No****11. EQUIPMENT HOIST**

- |     |     |         |   |
|-----|-----|---------|---|
| ___ | ___ | 11.1    | An equipment hoist shall be included to aid in down hole equipment launching and retrieval.                                   |
| ___ | ___ | 11.2    | The hoist shall conform to the following specifications:  |
| ___ | ___ | 11.2.1  | Lifting capacity of 500 pounds minimum.   |
| ___ | ___ | 11.2.2  | The system must be designed and manufactured using all applicable ANSI standards for mobile cranes.                           |
| ___ | ___ | 11.2.3  | Overall mast height shall not exceed 71.5".   |
| ___ | ___ | 11.2.4  | The boom shall have adjustable lengths of 52", 62", and 72".  |
| ___ | ___ | 11.2.5  | The boom shall use environmentally sealed needle bearings and thrust bearings.  |
| ___ | ___ | 11.2.6  | The boom shall be formed from 3/16" ASTM A572 Grade50 high tensile steel.   |
| ___ | ___ | 11.2.7  | The mounting location shall allow for equipment to be placed inside the vehicle at the appropriate storage location.          |
| ___ | ___ | 11.2.8  | Boom rotation must be 180° minimum.   |
| ___ | ___ | 11.2.9  | The system shall include a 10' control pendant.   |
| ___ | ___ | 11.2.10 | The winch shall be powered by the vehicle's 12VDC system, with circuit breaker protection.                                    |
| ___ | ___ | 11.2.11 | The hoist shall include a 60' length of 3/16" diameter galvanized aircraft quality steel cable, with a standard lifting hook. |

**12. WASH DOWN SYSTEM**

- |     |     |          |   |
|-----|-----|----------|---|
| ___ | ___ | 12.1     | A pressurized water system shall be supplied in order to rinse down hole equipment after an inspection.       |
| ___ | ___ | 12.2     | The wash down system shall conform to the following specifications:   |
| ___ | ___ | 12.2.1   | The pump shall operate from 12VDC with circuit breaker protection.  |
| ___ | ___ | 12.2.2   | The pump shall supply a minimum of 3.3gpm at 45psi.   |
| ___ | ___ | 12.2.3   | The system shall include a reservoir with the following features:   |
| ___ | ___ | 12.2.3.1 | 30 gallon capacity  |
| ___ | ___ | 12.2.3.2 | Fill port   |
| ___ | ___ | 12.2.3.3 | Drain port  |
| ___ | ___ | 12.2.3.4 | Mounted in equipment room, City reserves the option to request underbody location                             |
| ___ | ___ | 12.2.4   | The system shall include a spray nozzle.  |
| ___ | ___ | 12.2.5   | The system shall include a 25' length of 90psi-rated hose on a retractable reel.                              |
| ___ | ___ | 12.3     | The system shall also include a wash basin.   |
| ___ | ___ | 12.3.1   | The wash basin shall be located near the workbench and include a drain system.                                |
| ___ | ___ | 12.3.2   | The drain system shall include an 8 gallon gray water tank mounted under the vehicle with an RV-style hookup. |

**13. POWER CONTROL UNIT (PCU)**

- |     |     |          |  |
|-----|-----|----------|--|
| ___ | ___ | 13.1     | A power control unit (PCU) shall be provided to control and distribute power to the TV system equipment specified. |
| ___ | ___ | 13.2     | The PCU shall include the following features at a minimum:   |
| ___ | ___ | 13.2.1   | Housing for mounting in a standard 19" EIA electronics rack.   |
| ___ | ___ | 13.2.2   | Approval through test spec UL1012 for power units.   |
| ___ | ___ | 13.2.3   | All electrical connections to be plug-type, no "terminal block" wiring is allowed.                                 |
| ___ | ___ | 13.2.4   | All electrical connection plugs to be keyed and vibration proof  |
| ___ | ___ | 13.2.5   | Isolation transformer for clean downhole power signal source   |
| ___ | ___ | 13.2.6   | Front face of unit shall include the following controls:   |
| ___ | ___ | 13.2.6.1 | Camera power switch  |
| ___ | ___ | 13.2.6.2 | Camera power breaker reset button  |
| ___ | ___ | 13.2.6.3 | Camera voltage adjustment dial, 0 to 150V DC   |
| ___ | ___ | 13.2.6.4 | Camera current adjustment dial   |
| ___ | ___ | 13.2.6.5 | Camera remote focus and iris controls  |
| ___ | ___ | 13.2.6.6 | Pan and tilt controller connection   |
| ___ | ___ | 13.2.6.7 | Auxiliary lighthouse switch  |



**Meet Specs.****Yes No**

___	___	13.2.6.8	Lighthouse power switch
___	___	13.2.6.9	Lighthouse power breaker reset button
___	___	13.2.6.10	Lighthouse lamp power selector
___	___	13.2.6.11	Lighthouse intensity dial
___	___	13.2.6.12	Lighthouse overcurrent warning light
___	___	13.2.6.13	Auxiliary lighthouse controller connector
___	___	13.2.6.14	Auxiliary tractor controller connector
___	___	13.2.7	Diagnostic meters on front face of unit shall include:
___	___	13.2.7.1	Camera module voltage
___	___	13.2.7.2	Camera module current draw
___	___	13.2.7.3	Lighthouse voltage
___	___	13.2.7.4	Lighthouse current draw

**14. 15" LCD MONITOR(S)**

___	___	14.1	A 15" LCD monitor shall be supplied in the control room for viewing the inspection.
___	___	14.2	A 15" LCD monitor shall be supplied in the equipment room, facing rearward, for viewing the inspection at the rear of the vehicle.
___	___	14.3	The monitor(s) shall meet these minimum specifications:
___	___	14.3.1	Size = 15" diagonal
___	___	14.3.2	Dimensions = 15.0"h x 18.4"w x 7.5"d, weight = 11.7lbs.
___	___	14.3.3	Resolution = 1024x768
___	___	14.3.4	Brightness = 450 cd/m <sup>2</sup>
___	___	14.3.5	Viewing angle = 160° horizontal, 130° vertical
___	___	14.3.6	Contrast ratio = 400:1
___	___	14.3.7	Power signal = 100 to 240V AC at 50 to 60Hz
___	___	14.3.8	Video input from PC or component sources
___	___	14.3.9	6W total audio stereo output from internal speakers
___	___	14.3.10	Adjustments for H-position, V-position, contrast, tint, brightness, and color

**15. DVD RECORDER**

___	___	15.1	A DVD recorder system shall be included for recording of inspection video.
___	___	15.2	The video recorder shall include the following features at a minimum:
___	___	15.2.1	AC power input of 120V.
___	___	15.2.2	Mounted in standard 19" EIA electronics rack, DVD must be removable without removing recorder from panel.
___	___	15.2.3	Recorder bypass switch.
___	___	15.2.4	Commercial or professional grade.
___	___	15.2.5	Remote control with record, fast forward, pause, slow, stop, and rewind functions.
___	___	15.2.6	Minimum of (4) recording modes, for up to 10 hours of video inspection storage.
___	___	15.3	A microphone with flexible neck and remote on/off switch shall be included and mounted near the operator.
___	___	15.3.1	This shall allow audio to be recorded with the inspection.
___	___	15.4.	DVD devices that are consumer grade will be deemed unacceptable due to their limited duty cycle and lower overall picture quality.

**16. PAN AND TILT CAMERA WITH ZOOM AND LED LIGHTING**

___	___	16.1	A color pan and tilt view camera shall be supplied.
___	___	16.1.1	The camera shall include a zoom function and use directional long-life-rated LED light sources to provide adequate pipe wall illumination in sizes up to 72".
___	___	16.2	The camera shall have the following operational features:
___	___	16.2.1	Usable in 6" relined pipes and larger
___	___	16.2.2	Transmits a color video signal through at least 2000' of multi-conductor cable
___	___	16.2.3	Designed with solid-state circuitry to withstand shock and vibration
___	___	16.2.4	operates in climatic conditions from at least 0°C to 50°C with 100% RH

**Meet Specs.****Yes No**

	16.3	The camera module shall have the following electronic features:
___	___	16.3.1 Color Super HAD CCD, ¼"
___	___	16.3.2 Collection matrix of 768h x 494v pixels, total of 379,392
___	___	16.3.3 470h x 400v TV lines of resolution
___	___	16.3.4 NTSC color image scanning - 525 lines a 60Hz, 2:1 interlaced
___	___	16.3.5 Minimum illumination sensitivity of 0.1lux
___	___	16.3.6 Signal-to-noise ratio of at least 46dB
___	___	16.3.7 Precise image geometry with no image burn-in
___	___	16.3.8 Automatic light-compensating iris, with manual override
___	___	16.3.9 Regulated DC power input range of 18-60V
___	___	16.3.10 No visible streaking when viewing a standard EIA test chart
___	___	16.3.11 Software resident on upgradeable EEPROM
___	___	16.3.12 4.2 ~ 42mm, f1.8 zoom lens, 10x optical, 4x digital, 40:1 total zoom
___	___	16.3.13 Proportionally slowed camera movements when zooming
___	___	16.3.14 ½" to ∞ automatic focus, with manual override
	16.4	The camera chassis shall have the following electromechanical features:
___	___	16.4.1 Overall length of 13.75"
___	___	16.4.2 Body diameter of 2.375", fitting a standard 3" camera yoke
___	___	16.4.3 Head diameter of 3.75"
___	___	16.4.4 Stainless steel and anodized aluminum construction
___	___	16.4.5 360° continuous camera head axial rotation
___	___	16.4.6 Pan and tilt angle to view backward a minimum of 45°
___	___	16.4.7 Military-rated gold slip ring contacts
___	___	16.4.8 Scratchproof sapphire camera window
___	___	16.4.9 Sealed keyed military connector for cable hook up
___	___	16.4.10 DC motors with planetary gears, ball bearings, power all camera motions, with clutches to protect from overloads and impacts
___	___	16.4.11 Forks extending beyond the camera head to protect from frontal impacts
___	___	16.4.12 Forks inset into body pockets to withstand severe shocks
___	___	16.4.13 Dirt and pressure seals at all moving joints
___	___	16.4.14 Automatic home feature to upright forward viewing, with forks at side of camera head
	16.5	The camera lighting system shall have the following features:
___	___	16.5.1 A light ring internal to the directional camera head
___	___	16.5.2 LED light sources, rated for 10,000 hours of operation
___	___	16.5.3 Minimum luminance of 500cd
___	___	16.5.4 Light ring cavity separated from camera module housing using leak-proof military-rated glass hermetic seal
___	___	16.5.5 Field-replaceable polycarbonate LED window
	16.6	The camera shall be equipped with the following diagnostic and safety features:
___	___	16.6.1 Internally pressurized with dry nitrogen to a minimum of 15psi
___	___	16.6.2 An EIA color bar test chart display
___	___	16.6.3 A set of diagnostic telemetry, including:
___	___	16.6.3.1 Camera module current draw
___	___	16.6.3.2 Lighthouse voltage
___	___	16.6.3.3 Internal camera head humidity
___	___	16.6.3.4 Internal camera head pressure
___	___	16.6.3.5 Operating hours
___	___	16.6.3.6 Electronic serialization record
	16.7	The camera controller shall have the following features:
___	___	16.7.1 Joystick controller for camera head pan/tilt and rotational movements
___	___	16.7.2 Switch for manual focus override (in/out)
___	___	16.7.3 Switch for manual iris override (open/close)
___	___	16.7.4 Switch for diagnostic telemetry display (on/off)
___	___	16.7.5 Switch for camera home position
___	___	16.7.6 Desktop model, with cable connection to rear of PCU

**Meet Specs.****Yes No**

- \_\_\_ \_\_\_ 16.7.7 The camera shall be shipped with a damage-resistant case.  
 \_\_\_ \_\_\_ 16.7.7.1 The case shall have foam lining and metal closing latches, allowing shipping on commercial carriers.

**17. WHEEL DRIVE TRANSPORTER**

- \_\_\_ \_\_\_ 17.1 A remotely controlled wheeled transporter shall be supplied.  
 \_\_\_ \_\_\_ 17.1.1 The transporter system shall be able to propel an inspection camera through 6" to 30" pipes to a distance of up to 1000' from point of entry.
- \_\_\_ \_\_\_ 17.2 The transporter shall have the following operational features:  
 \_\_\_ \_\_\_ 17.2.1 Usable in 8" relined pipes and larger  
 \_\_\_ \_\_\_ 17.2.2 Capable of speeds of up to 65 feet per minute  
 \_\_\_ \_\_\_ 17.2.3 Capable of free-wheeling, allowing retrieval by cable and reel combination  
 \_\_\_ \_\_\_ 17.2.4 Capable of transporting a standard pan and tilt or mini-mainline camera
- \_\_\_ \_\_\_ 17.3 The transporter shall have the following electronic features:  
 \_\_\_ \_\_\_ 17.3.1 Continuous duty rated 12VDC drive motor  
 \_\_\_ \_\_\_ 17.3.2 Transporter shall accept controls from system power control unit transmitted through a maximum of 1000' of cable  
 \_\_\_ \_\_\_ 17.3.3 Complete solid-state design  
 \_\_\_ \_\_\_ 17.3.4 Field-replaceable mil-spec electrical connector for cable
- \_\_\_ \_\_\_ 17.4 The transporter shall have the following mechanical features:  
 \_\_\_ \_\_\_ 17.4.1 Maximum overall length of 23"  
 \_\_\_ \_\_\_ 17.4.2 Standard 3" camera yoke for mounting pan and tilt cameras  
 \_\_\_ \_\_\_ 17.4.3 Replaceable O-ring seals at all field-serviceable joint locations  
 \_\_\_ \_\_\_ 17.4.4 A transmission that includes:  
 \_\_\_ \_\_\_ 17.4.4.1 Gears in oil bath for maximum cooling and lubrication  
 \_\_\_ \_\_\_ 17.4.4.2 Neutral position to freewheel during retrieval  
 \_\_\_ \_\_\_ 17.4.4.3 Heavy duty worm drive gear to absorb drive line shock  
 \_\_\_ \_\_\_ 17.4.5 A drive train that includes:  
 \_\_\_ \_\_\_ 17.4.5.1 (Qty.6) 4" wheels for use in 8" to 18" un-relined lines  
 \_\_\_ \_\_\_ 17.4.5.2 (Qty.6) 3" wheels for use in 8" relined pipe  
 \_\_\_ \_\_\_ 17.4.5.3 (Qty.6) 5" wheels for use in 12" pipes and larger  
 \_\_\_ \_\_\_ 17.4.6 A tow cable assembly that relieves strain at the cable connection  
 \_\_\_ \_\_\_ 17.4.7 A loop cable that can be used for lifting the tractor without straining any drive components
- \_\_\_ \_\_\_ 17.5 A set of weighted riser blocks shall be included that automatically raise the camera to the center of a corresponding pipe size as well as add tractive effort to the transporter unit.
- \_\_\_ \_\_\_ 17.6 The transporter controller shall have the following features:  
 \_\_\_ \_\_\_ 17.6.1 Power switch with lamp  
 \_\_\_ \_\_\_ 17.6.2 Directional switch, 3-position toggle (F/N/R)  
 \_\_\_ \_\_\_ 17.6.3 Speed control dial  
 \_\_\_ \_\_\_ 17.6.4 Ammeter display for power draw to transporter  
 \_\_\_ \_\_\_ 17.6.5 Overload breaker protection
- \_\_\_ \_\_\_ 17.7 A foot pedal style controller shall be supplied in the control room under the desktop.  
 \_\_\_ \_\_\_ 17.7.1 This pedal shall only activate the transporter, with speed control remaining at the desktop controller.
- \_\_\_ \_\_\_ 17.8 A foot pedal style controller shall be supplied in the equipment room, stored next to the cable reel.  
 \_\_\_ \_\_\_ 17.8.1 This pedal shall activate the transporter motor, to aid in spotting the transporter for pickup following an inspection.
- \_\_\_ \_\_\_ 17.9 A spare parts kit shall be included with the unit that includes all parts that are expected to be replaced in the field.  
 \_\_\_ \_\_\_ 17.9.1 The kit shall also include any specialized tools that are regularly needed in the servicing of the transporter.
- \_\_\_ \_\_\_ 17.10 The transporter shall be shipped with a damage-resistant case.  
 \_\_\_ \_\_\_ 17.10.1 The case shall include a foam cradle, with solid exterior construction.

**Meet Specs.****Yes No****18. TRANSMISSION CABLE AND REEL SYSTEM**

- |     |     |           |   |
|-----|-----|-----------|---|
| ___ | ___ | 18.1      | A reel with multi-conductor cable shall be supplied.  |
| ___ | ___ | 18.1.1    | The cable shall be used for closed circuit video transmission as well as retrieval of the downhole equipment.             |
| ___ | ___ | 18.1.2    | The reel shall be capable of providing adequate force to the cable for equipment retrieval.                               |
| ___ | ___ | 18.2      | The reel shall have the following features:   |
| ___ | ___ | 18.2.1    | Stainless steel construction with powder coated finish  |
| ___ | ___ | 18.2.2    | Minimum ½ hp AC motor   |
| ___ | ___ | 18.2.3    | Transmission with minimum of three gear ratios plus neutral   |
| ___ | ___ | 18.2.4    | Linkage control on both reel and control room desktop   |
| ___ | ___ | 18.2.5    | Mechanical drive linkage between motor and drum   |
| ___ | ___ | 18.2.6    | All chains and linkages enclosed and safety labeled   |
| ___ | ___ | 18.2.7    | Low friction greased bearings to minimize drag  |
| ___ | ___ | 18.2.8    | Cable level wind that automatically lays cable evenly across drum   |
| ___ | ___ | 18.2.9    | Drop down cable guide with directional roller and locking positions   |
| ___ | ___ | 18.2.10   | Mechanical footage meter mounted on level wind  |
| ___ | ___ | 18.2.11   | Footage encoder to send electronic footage data to display system, ±2% accuracy minimum                                   |
| ___ | ___ | 18.2.12   | Sealed continuous gold contact slip ring assembly with the following features:  |
| ___ | ___ | 18.2.12.1 | Voltage range from 1µV to 460V  |
| ___ | ___ | 18.2.12.2 | Current range from 1nA to 25A   |
| ___ | ___ | 18.2.12.3 | Pulse DC frequencies to 100MHz  |
| ___ | ___ | 18.2.12.4 | Corrosion proof and maintenance free  |
| ___ | ___ | 18.2.12.5 | 12 circuits minimum   |
| ___ | ___ | 18.2.13   | Local control box, with direction, power, and speed controls  |
| ___ | ___ | 18.2.14   | Safety switch, front control lockout  |
| ___ | ___ | 18.2.15   | Remote desktop mounted controller, with direction, power, and speed controls  |
| ___ | ___ | 18.2.16   | Switchover plug, 24-pin minimum, to bypass reel for diagnostic purposes   |
| ___ | ___ | 18.2.17   | Drip pan mounted under reel assembly, draining through floor of vehicle   |
| ___ | ___ | 18.3      | The cable shall have the following features:  |
| ___ | ___ | 18.3.1    | Continuous length of 1000' minimum  |
| ___ | ___ | 18.3.2    | Diameter of 0.41" minimum   |
| ___ | ___ | 18.3.3    | Outer jacket of extruded Hytrel or other low-friction material  |
| ___ | ___ | 18.3.4    | Inner Kevlar strength braid, cable yield strength of 2000# minimum  |
| ___ | ___ | 18.3.5    | Withstand pressure of 800# minimum  |
| ___ | ___ | 18.3.6    | Continuous length terminated at molded field-repairable 12-pin casting  |
| ___ | ___ | 18.3.7    | Termination to include a strain relieving mechanism, bypassing strain on termination                                      |
| ___ | ___ | 18.3.8    | Construction of (10) separate conductors of adequate gauge for delivering power and control signals to downhole equipment |
| ___ | ___ | 18.3.9    | Construction including a shielded RG-59/U coaxial conductor for video transmission  |
| ___ | ___ | 18.3.10   | The cable shall also include a water blocking compound applied to the cable interstices.                                  |
| ___ | ___ | 18.3.10.1 | This is to prevent damaging materials from migrating through the cable should the jacket be cut or otherwise breached.    |
| ___ | ___ | 18.3.10.2 | Cable without blocking compound shall be deemed unacceptable.   |
| ___ | ___ | 18.3.11   | The cable shall also include a repair kit for repairing the termination in the field.                                     |

**19. DOWNHOLE GUIDE SYSTEM**

- |     |     |        |  |
|-----|-----|--------|--|
| ___ | ___ | 19.1   | A downhole guide system shall be supplied for guiding and protecting the cable between the inspection system and the pipe. |
| ___ | ___ | 19.2   | The system shall include the following devices at a minimum:   |
| ___ | ___ | 19.2.1 | Topside roller with aluminum roller and steel frame  |
| ___ | ___ | 19.2.2 | Down-hole roller with aluminum rollers and steel frame, quick-lock detachable  |

**Meet Specs.****Yes No**

- |     |     |          |  |
|-----|-----|----------|--|
| ___ | ___ | 19.2.3   | (Qty. 30') of fiberglass poles for attaching to down-hole roller, quick-lock detachable sections |
| ___ | ___ | 19.2.4   | Hook for attaching to poles allowing for roller to be hung from manhole ring                     |
| ___ | ___ | 19.2.5   | Extraction pole assembly for lifting equipment from manhole or culvert, including:               |
| ___ | ___ | 19.2.5.1 | Tractor lifting eye with attachment hardware   |
| ___ | ___ | 19.2.5.2 | (Qty. 3) quick-lock detachable reinforced fiberglass poles                                       |

**20. TRAINING**

- |     |     |        |   |
|-----|-----|--------|---|
| ___ | ___ | 20.1   | Within 15 days of delivery, a qualified factory representative shall fully instruct appointed personnel in the operation and maintenance of the sewer inspection equipment specified. |
| ___ | ___ | 20.1.1 | At a minimum, this instructional course shall be two (2) days in duration.  |
| ___ | ___ | 20.1.2 | Topics covered shall include operational procedures, maintenance procedures, and safety procedures.   |

**21. INSTRUCTIONAL MATERIALS**

- |     |     |        |  |
|-----|-----|--------|--|
| ___ | ___ | 21.1   | The following instructional materials must be delivered with the system:   |
| ___ | ___ | 21.1.1 | Set of DVDs or VHS tapes, operation, maintenance, and troubleshooting of equipment.  |
| ___ | ___ | 21.1.2 | Master set of equipment manuals, matched to specified system equipment, including vehicle chassis and any aftermarket equipment installed. |
| ___ | ___ | 21.1.3 | Copy set of equipment manuals, video system only, matched to specified system equipment.   |
| ___ | ___ | 21.1.4 | Manufacturer's parts catalog   |

**22. WARRANTY**

- |     |     |        |  |
|-----|-----|--------|--|
| ___ | ___ | 22.1   | The TV inspection system shall be warranted against manufacturing defects for a period of (12) months from the date of delivery at a minimum.  |
| ___ | ___ | 22.1.1 | Any installed equipment warranties that extend beyond this period (e.g. a vehicle 36 month / 36000 mile warranty) shall be passed on to the City of Lincoln by the TV system manufacturer. |

**23. DELIVERY**

- |     |     |      |  |
|-----|-----|------|--|
| ___ | ___ | 23.1 | The system shall be delivered to the City of Lincoln in first-class operating condition. Acceptance of the system shall be subject to inspection and approval by City personnel. |
|-----|-----|------|--|

Meet Specs.

Yes No**OPTIONAL EQUIPMENT**

Please include pricing for each option as noted on the proposal form.

**1 REEL PAYOUT ASSISTANCE - Option #1, Add to Mainline Reel**

- \_\_\_ \_\_\_ 1.1 A device shall be installed that will automatically assist the cable reel drum in paying out cable as the transporter drives through the pipeline. The device shall have sensors that automatically drive the reel when the cable reaches a designed tension limit.

**2. PAN AND TILT MINIATURE CAMERA - Option #2, Add vehicle-mounted miniature inspection system**

- \_\_\_ \_\_\_ 2.1 A color pan and tilt view camera shall be supplied.
- \_\_\_ \_\_\_ 2.1.1 The camera shall use directional long-life-rated LED light sources to provide adequate pipe wall illumination in sizes up to 36".
- \_\_\_ \_\_\_ 2.2 The camera shall have the following operational features
- \_\_\_ \_\_\_ 2.2.1 Usable in 5" relined pipes and larger
- \_\_\_ \_\_\_ 2.2.2 Transmits a color video signal through at least 1000' of multi-conductor cable
- \_\_\_ \_\_\_ 2.2.3 Designed with solid-state circuitry to withstand shock and vibration
- \_\_\_ \_\_\_ 2.2.4 Operates in climatic conditions from at least 0°C to 50°C with 100% RH
- \_\_\_ \_\_\_ 2.3 The camera module shall have the following electronic features
- \_\_\_ \_\_\_ 2.3.1 Color Super HAD CCD, a"
- \_\_\_ \_\_\_ 2.3.2 Collection matrix of 768h x 494v pixels, total of 379,392
- \_\_\_ \_\_\_ 2.3.3 480h TV lines of resolution
- \_\_\_ \_\_\_ 2.3.4 NTSC color image scanning - 525 lines a 60Hz, 2:1 interlaced
- \_\_\_ \_\_\_ 2.3.5 Minimum illumination sensitivity of 0.14lux
- \_\_\_ \_\_\_ 2.3.6 Automatic light-compensating iris, with manual override
- \_\_\_ \_\_\_ 2.3.7 Regulated DC power input range of 18-36V
- \_\_\_ \_\_\_ 2.3.8 Software resident on upgradeable EEPROM
- \_\_\_ \_\_\_ 2.3.9 " to ∞ automatic focus, with manual override
- \_\_\_ \_\_\_ 2.4 The camera chassis shall have the following electromechanical features:
- \_\_\_ \_\_\_ 2.4.1 Overall length of 5.375"
- \_\_\_ \_\_\_ 2.4.2 Head diameter of 2.7"
- \_\_\_ \_\_\_ 2.4.3 Stainless steel and anodized aluminum construction
- \_\_\_ \_\_\_ 2.4.4 360° continuous camera head axial rotation
- \_\_\_ \_\_\_ 2.4.5 Pan and tilt angle to view backward a minimum of 45°
- \_\_\_ \_\_\_ 2.4.6 Military-rated gold slip ring contacts
- \_\_\_ \_\_\_ 2.4.7 Scratchproof sapphire camera window
- \_\_\_ \_\_\_ 2.4.8 Sealed keyed military connector with gold plated contacts
- \_\_\_ \_\_\_ 2.4.9 DC motors with planetary gears, ball bearings, power all camera motions, with clutches to protect from overloads and impacts
- \_\_\_ \_\_\_ 2.4.10 Dirt and pressure seals at all moving joints
- \_\_\_ \_\_\_ 2.4.11 Automatic home feature to upright forward viewing, with forks above and below camera head
- \_\_\_ \_\_\_ 2.4.12 Fast-check LED indicator for low camera head pressure
- \_\_\_ \_\_\_ 2.4.13 Forks at top and bottom of camera head at home position, allowing quicker viewing of side-entry laterals
- \_\_\_ \_\_\_ 2.5 The camera lighting system shall have the following features
- \_\_\_ \_\_\_ 2.5.1 A light ring internal to the directional camera head
- \_\_\_ \_\_\_ 2.5.2 LED light sources, rated for 10,000 hours of operation
- \_\_\_ \_\_\_ 2.5.3 Minimum luminance of 500cd
- \_\_\_ \_\_\_ 2.5.4 Light ring cavity separated from camera module housing using leak-proof military-rated glass hermetic seal
- \_\_\_ \_\_\_ 2.5.5 Field-replaceable polycarbonate LED window
- \_\_\_ \_\_\_ 2.5.6 Cameras that offer lighting through any style incandescent bulb with considerably shorter life ratings will be deemed unacceptable.
- \_\_\_ \_\_\_ 2.6 The camera shall be controlled by the same unit for the standard mainline camera. Systems that require a different controller for miniature and standard camera shall be deemed unacceptable.

**Meet Specs.****Yes No****3. WHEEL DRIVE MINIATURE TRANSPORTER**

- |     |     |         |   |
|-----|-----|---------|---|
| ___ | ___ | 3.1     | A remotely controlled wheeled transporter shall be supplied.  |
| ___ | ___ | 3.1.1   | The transporter system shall be able to propel an inspection camera through 6" to 18" pipes to a distance of up to 1000' from point of entry. |
| ___ | ___ | 3.2     | The transporter shall have the following operational features:  |
| ___ | ___ | 3.2.1   | Usable in 6" relined pipes and larger   |
| ___ | ___ | 3.2.2   | Capable of lifting the camera head a minimum of 4"  |
| ___ | ___ | 3.2.3   | Capable of free-wheeling, allowing retrieval by cable and reel combination  |
| ___ | ___ | 3.2.4   | Capable of transporting a standard pan and tilt or mini-mainline camera   |
| ___ | ___ | 3.3     | The transporter shall have the following electronic features:   |
| ___ | ___ | 3.3.1   | Continuous duty rated brushless drive motors, (1) motor per side  |
| ___ | ___ | 3.3.2   | Transporter shall accept controls from system power control unit transmitted through a maximum of 1000' of cable                              |
| ___ | ___ | 3.3.3   | Complete solid-state design   |
| ___ | ___ | 3.3.4   | Articulated rear cable connector for added cable strain relief  |
| ___ | ___ | 3.3.5   | Rearward viewing color camera with LED lighting, for viewing behind tractor during and inspection   |
| ___ | ___ | 3.3.6   | Integral 512 Hz transmitting beacon   |
| ___ | ___ | 3.4     | The transporter shall have the following mechanical features:   |
| ___ | ___ | 3.4.1   | Maximum overall length of 16" including rear connector and miniature camera   |
| ___ | ___ | 3.4.2   | Forward attachment for mounting miniature pan and tilt camera   |
| ___ | ___ | 3.4.3   | Replaceable O-ring seals at all field-serviceable joint locations   |
| ___ | ___ | 3.4.4   | Manually-operated camera lifting mechanism, 4" minimum rise   |
| ___ | ___ | 3.4.5   | A transmission that includes:   |
| ___ | ___ | 3.4.5.1 | Gears in oil bath for maximum cooling and lubrication   |
| ___ | ___ | 3.4.5.2 | Neutral position to freewheel during retrieval  |
| ___ | ___ | 3.4.5.3 | Heavy duty worm drive gear to absorb drive line shock   |
| ___ | ___ | 3.4.6   | An enclosed drive train that includes:  |
| ___ | ___ | 3.4.6.1 | (Qty.6) 4" wheels for use in 8" to 18" un-relined lines   |
| ___ | ___ | 3.4.6.2 | (Qty.6) 3" wheels for use in 6" relined pipe  |
| ___ | ___ | 3.4.6.3 | (Qty.6) 5" wheels for use in 12" pipes and larger   |
| ___ | ___ | 3.4.7   | All wheels must be interchangeable with a single fastener   |
| ___ | ___ | 3.5     | A spare parts kit shall be included with the unit that includes all parts that are expected to be replaced in the field.                      |
| ___ | ___ | 3.5.1   | The kit shall also include any specialized tools that are regularly needed in the servicing of the mini-transporter.                          |
| ___ | ___ | 3.6     | The camera and transporter shall be shipped with a damage-resistant case.   |
| ___ | ___ | 3.6.1   | The case shall include a foam cradle, with solid exterior construction.   |
| ___ | ___ | 3.7     | The transporter controller shall have the following features:   |
| ___ | ___ | 3.7.1   | Power supply unit, mounted in standard 19" EIA rack, with the following features:   |
| ___ | ___ | 3.7.1.1 | Power switch with lamp  |
| ___ | ___ | 3.7.1.2 | Directional switch, 3-position toggle (F/N/R)   |
| ___ | ___ | 3.7.1.3 | Speed control dial  |
| ___ | ___ | 3.7.1.4 | Voltage and ammeter display for power draw to transporter   |
| ___ | ___ | 3.7.1.5 | Overload breaker protection   |
| ___ | ___ | 3.7.2   | Desktop joystick controller for directional control   |

**4. TRANSMISSION CABLE AND REEL SYSTEM**

- |     |     |       |   |
|-----|-----|-------|---|
| ___ | ___ | 4.1   | A portable reel with multi-conductor cable shall be supplied.   |
| ___ | ___ | 4.1.1 | The cable shall be used for closed circuit video transmission as well as retrieval of the downhole equipment. |
| ___ | ___ | 4.1.2 | The reel shall be capable of providing adequate force to the cable for equipment retrieval.                   |

**Meet Specs.****Yes No**

___	___	4.2	The reel shall have the following features:
___	___	4.2.1	Aluminum construction with anodized finish
___	___	4.2.2	Cable storage drum and frame handles
___	___	4.2.3	Overall dimensions 15" x 22" x 15" maximum in any direction
___	___	4.2.4	120V AC motor
___	___	4.2.5	Clutch system with free wheeling capability and manual override
___	___	4.2.6	Mechanical drive chain between clutch and drum
___	___	4.2.7	All chains and linkages enclosed and safety labeled
___	___	4.2.8	Low friction greased bearings to minimize drag
___	___	4.2.9	Cable level wind that automatically lays cable evenly across drum with manual override
___	___	4.2.10	Mechanical footage meter mounted on level wind
___	___	4.2.11	Footage encoder to send electronic footage data to display system, $\pm 2\%$ accuracy minimum
___	___	4.2.12	Sealed continuous gold contact slip ring assembly with the following features:
___	___	4.2.12.1	Voltage range from 1 $\mu$ V to 460V
___	___	4.2.12.2	Current range from 1nA to 25A
___	___	4.2.12.3	Pulse DC frequencies to 100MHz
___	___	4.2.12.4	Corrosion proof and maintenance free
___	___	4.2.12.5	12 circuits minimum
___	___	4.2.13	Control panel with speed and direction controls
___	___	4.2.14	Mounting kit for securing reel in a vehicle application
___	___	4.2.15	Snap-in cable guide with roller and locking positions
___	___	4.3	The cable shall have the following features:
___	___	4.3.1	Continuous length of 1000' minimum
___	___	4.3.2	Diameter of 0.28" minimum
___	___	4.3.3	Rated pull strength of 500 pounds minimum
___	___	4.3.4	Outer jacket of low-friction abrasion-resistant material
___	___	4.3.5	Continuous length terminated at resin-free 12-pin connector
___	___	4.3.6	Construction of (10) separate conductors of adequate gauge for delivering power and control signals to downhole equipment
___	___	4.3.7	Termination to field-replaceable resin-free sealed tapered connector
___	___	4.4	The cable shall also include a repair kit for repairing the termination in the field.

**5. ON-BOARD AC POWER SYSTEM, 6KW - Option #3 , Alternate Layout Configuration**  
**(Substitute for AC Power System)**

___	___	5.1	The system shall include an on-board electrical power source rated for 6kW of alternating current output.
___	___	5.2	All electrical fixtures shall be appropriate for the complete electrical requirements of the system and are installed to NEC codes and local requirements.
___	___	5.3	All wiring shall be run in protective conduits.
___	___	5.4	The electrical system shall include an AC power distribution panel, with a minimum of (6) circuit breakers of appropriate size.
___	___	5.5	A disconnection feature shall be provided for the on-board power supply.
___	___	5.5.1	This will allow for the system to be connected to a commercial 120V AC house power supply through an exterior connection in the vehicle.
___	___	5.5.2	The unit shall be an automatic switchover box with time-delay protection.
___	___	5.5.3	There shall be a weatherproof housing in the driver's side of the vehicle body at an appropriate power rating for the system.
___	___	5.5.4	There shall also be a house power cord with weatherproof plug and socket for attaching to house power.
___	___	5.6	The electrical system shall include a 12V system.
___	___	5.6.1	This shall include a 600CCA 12V automotive battery in a protective case as well as a minimum 10A battery-charging unit.
___	___	5.6.2	The 12V system shall be for starting the generator as well as powering all 12V aftermarket equipment including emergency lighting and pumps.
___	___	5.6.3	This shall prevent any additional load on the vehicle's 12V system.
___	___	5.6.4	Any 12V installed equipment that ties into the vehicle's 12V system shall be deemed unacceptable.



**Meet Specs.****Yes No**

- |     |     |          |   |
|-----|-----|----------|---|
| ___ | ___ | 5.7      | The overall generator set shall include the following features:   |
| ___ | ___ | 5.7.1    | Commercial mobile duty cycle  |
| ___ | ___ | 5.7.2    | Remote start and stop capability  |
| ___ | ___ | 5.7.3    | Local and remote control panels   |
| ___ | ___ | 5.7.4    | Fueled from vehicle's fuel tank, with safety preventing tank running empty  |
| ___ | ___ | 5.8      | The engine powering the system shall have the following features:   |
| ___ | ___ | 5.8.1    | Gas powered commercial generator  |
| ___ | ___ | 5.8.2    | Radiator with enclosed cooling fan  |
| ___ | ___ | 5.8.3    | Replaceable air cleaner   |
| ___ | ___ | 5.8.4    | Electric fuel pump  |
| ___ | ___ | 5.8.5    | Replaceable oil filter and fuel filters   |
| ___ | ___ | 5.8.6    | Spark arrest muffler  |
| ___ | ___ | 5.8.7    | Automatic shutdown for low oil pressure and high temperature  |
| ___ | ___ | 5.9      | The alternator producing the electrical power shall have the following features:  |
| ___ | ___ | 5.9.1    | Rated AC output of 120V, 60Hz   |
| ___ | ___ | 5.9.2    | Double-sealed long-life ball bearings   |
| ___ | ___ | 5.9.3    | Electrographic long-life brushes  |
| ___ | ___ | 5.9.4    | High quality pure sine wave output  |
| ___ | ___ | 5.10     | The generator mounting system shall include the following:  |
| ___ | ___ | 5.10.1   | Generator enclosure including the following:  |
| ___ | ___ | 5.10.1.1 | Located underneath the vehicle body   |
| ___ | ___ | 5.10.1.2 | Louvered metal enclosure  |
| ___ | ___ | 5.10.1.3 | Lockable outside access door with ventilation grating   |
| ___ | ___ | 5.10.2   | Mounting bridge with the following features:  |
| ___ | ___ | 5.10.2.1 | Welded steel framing  |
| ___ | ___ | 5.10.2.2 | Sliding rails with ball bearing rollers   |
| ___ | ___ | 5.10.2.3 | Positive lock mounting bolts for each sliding rail  |
| ___ | ___ | 5.10.3   | Flexible electrical, fuel, and exhaust connections  |
| ___ | ___ | 5.11     | The system shall also include a remote control panel including voltmeter, frequency meter, hour meter, and start/stop switch. |
| ___ | ___ | 5.11.1   | The panel shall be mounted in the control room within clear view of the operator.   |

**6. CONTROL ROOM - Substitute for Control Room**

- |     |     |           |  |
|-----|-----|-----------|--|
| ___ | ___ | 6.1       | All specifications listed under Section 10 will remain the same except for the following:  |
| ___ | ___ | 6.1.1     | Replace Section 10.7.3 with the following:   |
| ___ | ___ | 6.1.1.1   | A minimum 16"h x 30"w tinted Plexiglas window, allowing operator to view rear of vehicle.  |
| ___ | ___ | 6.1.2     | Replace Section 10.11 with the following:  |
| ___ | ___ | 6.1.2.1   | The room shall include a standard 19" EIA electronics rack for the secure mounting of the system's electronic components.                        |
| ___ | ___ | 6.1.2.1.1 | The rack shall be mounted above the window of the bulkhead wall, and include sufficient free space for future electronic upgrades to the system. |

**7. EQUIPMENT ROOM - Substitute for Equipment Rooms**

- |     |     |         |   |
|-----|-----|---------|---|
| ___ | ___ | 7.1     | All specifications listed under Section 11 will remain the same except for the following: |
| ___ | ___ | 7.1.1   | Replace Section 11.8.4 with an:   |
| ___ | ___ | 7.1.1.1 | overhead in-closed storage with sliding doors.  |

# PROPOSAL FORM SPECIFICATION NO. 07-173

**BID OPENING TIME: 12:00 NOON**  
**DATE: June 1, 2007**

The undersigned bidder, having full knowledge of the requirements of the City of Lincoln for the below listed items and the contract documents (which include Notice to Bidders, Instructions to Bidders, this Proposal, Specifications, Contract, and any and all addenda) and all other conditions of the Proposal, agrees to sell to the City the below listed items for the performance of this Specification, complete in every respect, in strict accordance with the contract documents at and for unit prices listed below.

## THE REQUIREMENTS FOR: REBID PIPELINE TELEVISION INSPECTION SYSTEM

### BIDDING SCHEDULE

<u>ITEM</u>	<u>ITEM DESCRIPTION</u>	<u>QTY</u>	<u>EACH</u>	<u>TOTAL</u>
1.	Pipeline Television Inspection Vehicle <b>Chassis Only</b>	1	\$ _____	\$ _____
2.	Pipeline Television Inspection Vehicle <b>All equipment, rigging, labor, delivery as per specifications</b>	1	\$ _____	\$ _____
3.	<b>Trade-In Allowance OR Offer To Purchase</b> <b>1996 Chevy Van and all accessories</b>	1	\$ _____	\$ _____
4.	<b>OPTIONAL EQUIPMENT</b> Reel Payout Assistance	1	\$ _____	\$ _____
5.	<b>OPTIONAL EQUIPMENT</b> Pan and Tilt Mini Camera	1	\$ _____	\$ _____
6.	<b>OPTIONAL EQUIPMENT</b> Wheel Drive Mini Transporter	1	\$ _____	\$ _____
7.	<b>OPTIONAL EQUIPMENT</b> Transmission Cable and Reel System	1	\$ _____	\$ _____
8.	<b>OPTIONAL EQUIPMENT</b> On-Board AC Power System 6kw	1	\$ _____	\$ _____
9.	<b>OPTIONAL EQUIPMENT</b> Control Room Substitute Layout	1	\$ _____	\$ _____
10.	<b>OPTIONAL EQUIPMENT</b> Equipment Room Substitute Layout	1	\$ _____	\$ _____
<b>TOTAL</b>				<b>\$ _____</b>

**BID SECURITY REQUIRED:**    Yes   X      No \_\_\_\_\_  
Amount:    5% Bid Bond

**Performance Bond - 100%**    Yes   X      Will be requested upon award of contract

AFFIRMATIVE ACTION PROGRAM: Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16). The Equal Opportunity Officer will determine compliance or non-compliance with the City's policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

The undersigned signatory for the bidder represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

**RETURN 2 COMPLETE COPIES OF BID AND SUPPORTING MATERIAL.  
MARK OUTSIDE OF BID ENVELOPE:  
SEALED BID FOR SPEC. 07-173**

_____ <b>COMPANY NAME</b>	_____ <b>BY    (Signature)</b>
_____ <b>STREET ADDRESS or P.O. BOX</b>	_____ <b>(Print Name)</b>
_____ <b>CITY, STATE            ZIP CODE</b>	_____ <b>(Title)</b>
_____ <b>TELEPHONE No.        FAX No.</b>	_____ <b>(Date)</b>
_____ <b>E-MAIL ADDRESS</b>	_____ <b>ESTIMATED DELIVERY DAYS</b>

Bids may be inspected in the Purchasing Division during normal business hours after tabulation and review by a Purchasing Agent. Bid tabulations can be viewed on our website at: [lincoln.ne.gov](http://lincoln.ne.gov)    Keyword: **Bid**    The Intent to Award will be listed on the website when a recommendation is received from the Department.

# INSTRUCTIONS TO BIDDERS

## CITY OF LINCOLN, NEBRASKA

### **BIDDING PROCEDURE**

- 1.1 Bidder shall submit one (1) complete set of the bid documents and all supporting material, unless otherwise stipulated. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initiated by the signer of the bid. Bidder shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder's letterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document.
- 1.3 Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a quotation on an item-by-item basis. Bidding documents shall be clearly marked indicating the kind of proposal being submitted.
- 1.4 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.5 Bids received after the time and date established for receiving bids will be rejected.
- 1.6 If bidding on a Construction Contract, the City of Lincoln's Standard Specifications for Municipal Construction 2006 shall apply.
  - 1.6.1 Bidders may obtain this document from the City's Design Engineering Division of Public Works & Utilities for a small fee.
  - 1.6.2 Said document can be reviewed at Design Engineering or the Purchasing Division.
  - 1.6.3 The Standard Conditions are available on the web site.  
<http://www.lincoln.ne.gov/city/pworks/engine/doconst/standard/stdspec/index.htm>

### **BIDDER'S SECURITY**

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bidder's bond, may be required to be submitted with this bid document, as indicated on the Proposal Form.
- 2.2 If alternates are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful bidder(s) as follows:
  - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
  - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of bidders to whom an award is being considered until either:
  - 2.5.1 A contract has been executed and bonds have been furnished.
  - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
  - 2.5.3 All bids have been rejected.
- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this specification document:
  - 2.6.1 If the bidder fails to deliver the equipment or merchandise in full compliance with the accepted proposal and specifications.
  - 2.6.2 If the bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the bidder fails to provide sufficient bonds or insurance within the time period as established in this specification document.

### **BIDDER'S REPRESENTATION**

- 3.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 3.2 Each bidder for services further represents that the bidder has examined and is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

### **CLARIFICATION OF SPECIFICATION DOCUMENTS**

- 4.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the specification documents.
- 4.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least five (5) calendar days prior to the date and time for receipt of bids.
- 4.3 Changes made to the specification documents will be made by written addenda to all known prospective bidders and posted on the City-County website at [lincoln.ne.gov](http://lincoln.ne.gov) Keyword - Bid.
- 4.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the City; and bidders shall not rely upon such interpretations or changes.

### **ADDENDA**

- 5.1 Addenda are written instruments issued by the City prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 5.2 Copies of addenda will be made available for inspection at the office of the Purchasing Agent and on the City-County website.
- 5.3 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 5.4 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

### **INDEPENDENT PRICE DETERMINATION**

- 6.1 By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

### **ANTI-LOBBYING PROVISION**

- 7.1 During the period between the bid advertisement date and the contract award, bidders, including their agents and representatives, shall not lobby or promote their bid with any member of the City Council or City Staff except in the course of City-sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

### **BRAND NAMES**

- 8.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 8.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 8.3 Bids for alternate items shall be stated in the appropriate brand on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number from the specification document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.
- 8.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the City's specifications.

### **DEMONSTRATIONS/SAMPLES**

- 9.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the City.
- 9.2 Such demonstration can be at the City delivery location or a surrounding community.
- 9.3 If bidder does not have an item in the area, it will be at the bidder's expense to send appropriate City personnel to the nearest location to view and inspect proposed item(s).
- 9.4 If items are small and malleable, the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the City of acceptable goods. Bidders must indicate how samples are to be returned.

### **DELIVERY (Non-Construction)**

- 10.1 Each bidder shall state on his proposal form the date upon which he can make delivery of all equipment or merchandise.
- 10.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.
- 10.3 All bids shall be based upon **inside** delivery of the equipment/ merchandise F.O.B. the City at the location specified by the City, with all transportation charges paid.
- 10.4 At the time of delivery, a designated City of Lincoln employee will sign the invoice/packing slip. The signature will only indicate that the order has been received and the items actually delivered agree with the delivery invoice. This signature does not indicate all items met specifications, were received in good condition and/or that there is not possible hidden damage or shortages.

## **11. WARRANTIES, GUARANTEES AND MAINTENANCE**

- 11.1 Copies of the following documents must accompany the bid proposal for all items being bid:
  - 11.1.1 Manufacturer's warranties and/or guarantees.
  - 11.1.2 Bidder's maintenance policies and associated costs.
- 11.2 As a minimum requirement of the City, the bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the City. Replacement parts of defective components shall be shipped at no cost to the City. Shipping costs for defective parts required to be returned to the bidder shall be paid by the bidder.

## **12. ACCEPTANCE OF MATERIAL**

- 12.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 12.2 Material delivered under this proposal shall remain the property of the bidder until:
  - 12.2.1 A physical inspection and actual usage of this material is made and found to be acceptable to the City; and
  - 12.2.2 Material is determined to be in full compliance with the specifications and accepted proposal.
- 12.3 In the event the delivered material is found to be defective or does not conform to the specification documents and accepted proposal, then the City reserves the right to cancel the order upon written notice to the bidder and return materials to the bidder at bidder's expense.
- 12.4 Successful bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of the City of Lincoln, Nebraska, as required by the specification documents or purchase orders.
- 12.5 Selling dealer's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forgings, stampings, nameplates and logos are acceptable.

## **13. BID EVALUATION AND AWARD**

- 13.1 The signed bid proposal shall be considered an offer on the part of the bidder. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 13.2 No bid shall be modified or withdrawn for a period of ninety (90) calendar days after the time and date established for receiving bids, and each bidder so agrees in submitting the bid.
- 13.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 13.4 The bid will be awarded to the lowest responsible, responsive bidder whose proposal will be most advantageous to the City, and as the City deems will best serve its requirements.
- 13.5 The City reserves the right to accept or reject any or all bids; to request rebids; to award bids item-by-item, with or without alternates, by groups, or "lump sum"; to waive minor irregularities in bids; such as shall best serve the requirements and interests of the City.
- 13.6 In order to determine if the Bidder has the experience, qualifications, resources and necessary attributes to provide the quality workmanship, materials and management required by the plans and specifications, the Bidder may be required to complete and submit additional information as deemed necessary by the City. Failure to provide the information requested to make this determination may be grounds for a declaration of non-responsive with respect to the Bidder.
- 13.7 The City reserves the right to reject irregular bids that contain unauthorized additions, conditions, alternate bids, or irregularities that make the Bid Proposal incomplete, indefinite or ambiguous.
- 13.8 Any governmental agency may piggy back on any contract entered into from this bid.

## **14. INDEMNIFICATION**

- 14.1 The bidder shall indemnify and save harmless the City of Lincoln, Nebraska from and against all losses, claims, damages, and expenses, including, attorney's fees arising out of or resulting from the performance of the contract that results in bodily injury, sickness, disease, death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom and is caused in whole or in part by the Bidder, any subcontractor, any directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This section will not require the Bidder to indemnify or hold harmless the City of Lincoln for any losses, claims damages, and expenses arising out of or resulting from the sole negligence of the City of Lincoln, Nebraska.

- 14.2 In any and all claims against the City or any of its members, officers or employees by an employee of the bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 13.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

## **15. TERMS OF PAYMENT**

- 15.1 Unless stated otherwise, the City will begin processing payment within thirty (30) calendar days after all labor has been performed and all equipment or other merchandise has been delivered, and all such labor and equipment and other materials have met all contract specifications.

## **16. LAWS**

- 16.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.
- 16.2 Bidder agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.

## **17. AFFIRMATIVE ACTION**

- 17.1 The City of Lincoln-Lancaster County Purchasing Division provides equal opportunity for all bidders and encourages minority businesses and women's business enterprises to participate in our bidding process.

## **18. LIVING WAGE**

- 18.1 The bidders agree to pay all employees employed in the performance of this contract, a base wage of not less than the City Living Wage per section 2.81 of the Lincoln Municipal Code. This wage is subject to change every July.

## **19. EXECUTION OF AGREEMENT**

- 19.1 Depending on the type of service provided, one of the following three (3) methods will be employed. The method applicable to this contract will be checked below:

- X   a. This Contract shall consist of a **PURCHASE ORDER** and a copy of the suppliers signed bid (or referenced bid number) attached and that the same, in all particulars, becomes the agreement and contract between the parties hereto: that both parties thereby accept and agree to the terms and conditions of said bid documents, and that the parties are bound thereby and the compensation to be paid the Supplier is as set forth in the Supplier's Bid. Items not awarded, if any, have been deleted.
- b. The contract shall consist of a **YEARLY AGREEMENT** and a copy of the suppliers signed bid attached and that the same, in all particulars, becomes the agreement and contract between the parties hereto. That both parties thereby accept and agree to the terms and conditions of said bid documents, and that the parties are bound thereby and the compensation to be paid the Supplier is as set forth in the Suppliers' Bid. Items not awarded, if any, have been deleted.
- c. Three (3) copies of the **CONTRACT**, unless otherwise noted.
  - 1. City will furnish three (3) copies of the Contract to the successful Bidder who shall prepare attachments as required. Insurance as evidenced by a Certificate of Insurance, surety bonds properly executed, and Agreement signed with the date of signature shall be attached.
  - 2. The prepared documents shall be delivered to the City within 10 days (unless otherwise noted).
  - 3. The City will sign the Contract Agreement, insert the date of signature at the beginning of the Contract Agreement, prepare an Executive Order to go to the Mayor for signature.
  - 4. Upon approval and signature from the Mayor, the City will return one copy to the Contractor.